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Study Committee on Arizona's 911 System

Final Report

December 1, 2001

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LEGISLATIVE STUDY COMMITTEE REPORTS

Study Committee on Arizona's 911 System

Final Report
December 1, 2001

Members

Representative Bob Robson
Co-Chairman
Representative Brimhall
Representative Burton-Cahill
Representative Chase
Representative Graf
Representative Marsh

Senator Dean Martin
Co-Chairman
Senator Bennett
Senator Cummiskey
Senator Hellon
Senator Mitchell
Senator Valadez

AUTHORIZATION:

The Study Committee on Arizona's 911 System was established by Laws 2001, Chapter 373. The study committee was part of a bill that provided an increase in the telecommunications service excise tax to fund equipment upgrades used for emergency telecommunications services.

DUTIES:

The study committee is directed to examine and hold hearings regarding:

- The necessity of the requirements for maintaining and upgrading the current 911 system.
- The funding mechanisms utilized by the state of Arizona to provide services and equipment required to handle 9-1-1 calls.
- The cost estimates for maintaining and upgrading the current 911 system.
- Recommendations for funding mechanisms to cover the maintenance and upgrades of the current 9-1-1 system, including determining the advisability of separating the monies in the revolving fund between wire and wireless providers.
- Report to the Governor, President of the Senate and the Speaker of the House of Representatives by December 1, 2001.

ACTION:

The study committee met and received information from the Arizona Department of Administration (ADOA) 911 office. In addition, the committee heard testimony from the 911 centers in Phoenix and Tucson.

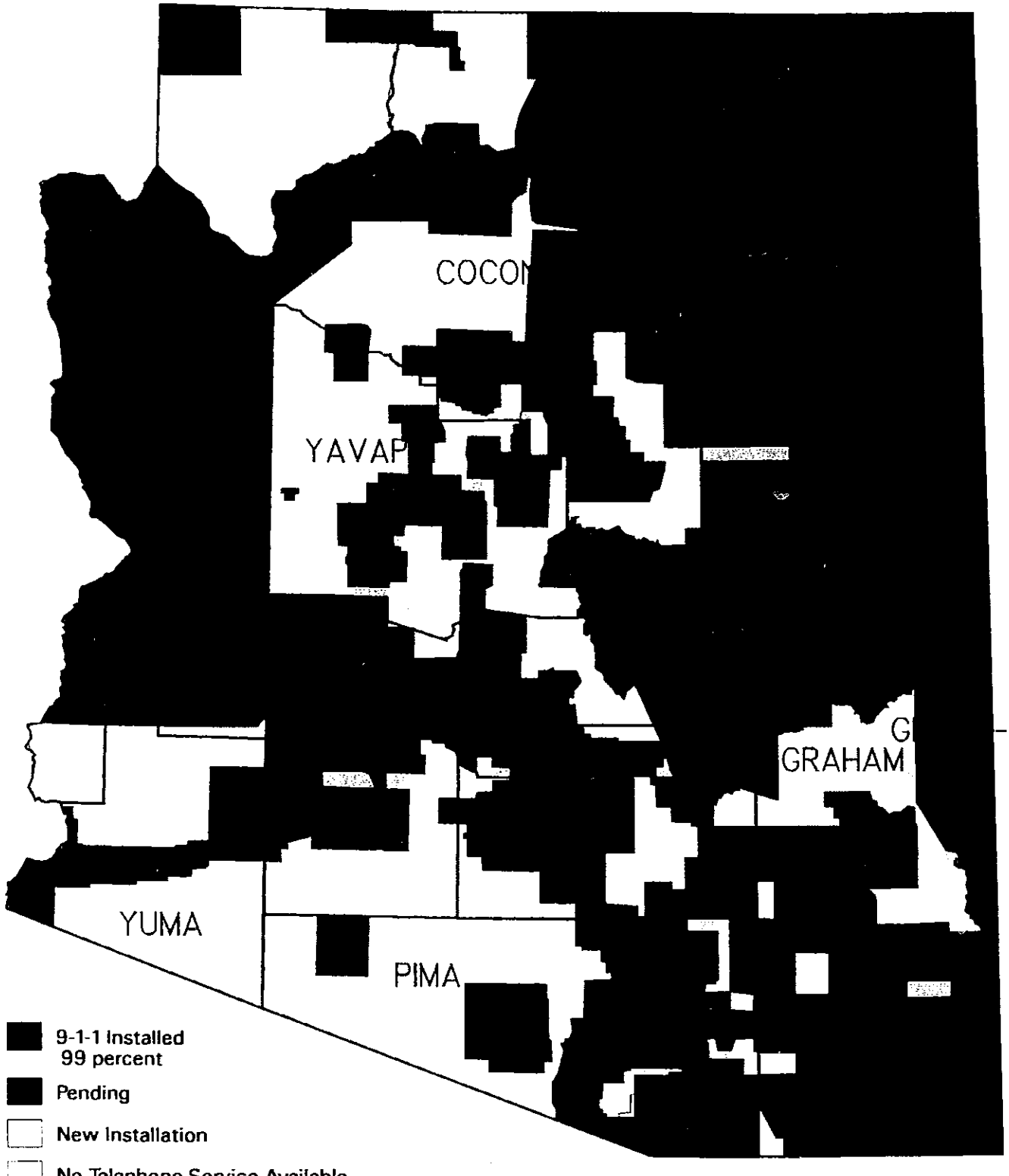
The Committee reviewed the history of the 911 telecommunications service excise tax, including actions that have been taken on the federal level as well as the state level.

In addition, the Committee toured the 911 facilities in central Phoenix and in Buckeye. The purpose of the tour was to see the actual facilities that house the Public Safety Answering Point (PSAP) centers and the difference in technology and needs that exists throughout the state.

Arizona 9-1-1 Status

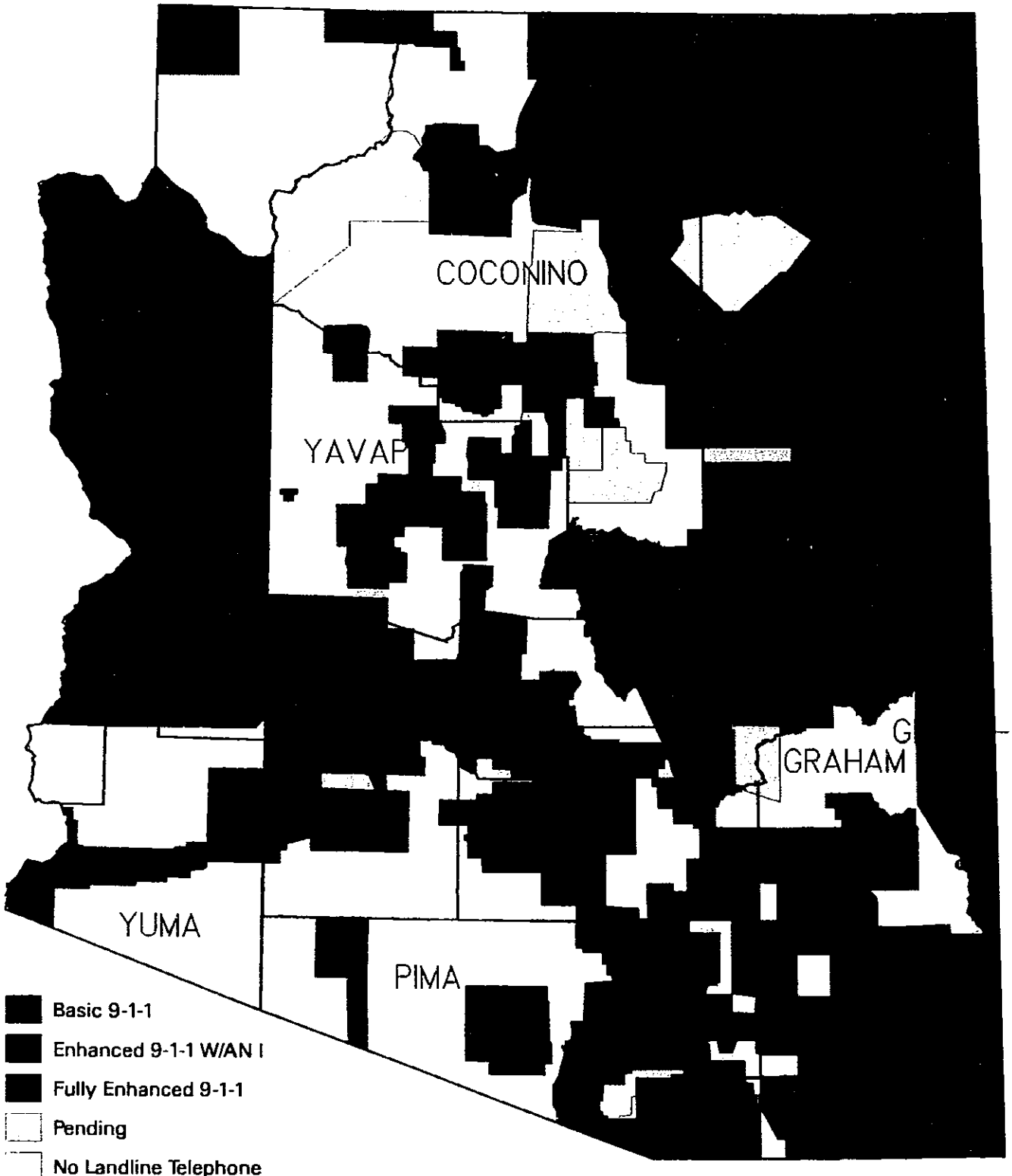
- More than 99% of customers with telephone service in the state have access to 9-1-1.
- Basic 9-1-1 provides only voice communication capabilities between the 9-1-1 center and the caller.
- Enhanced 9-1-1 with ANI (Automatic Number Identification) provides additional network features, which includes the delivery of the telephone number of the caller. A political subdivision must be committed to the completion of an addressing program before an Enhanced 9-1-1 program can begin.
- Fully Enhanced 9-1-1 provides the call taker with both the telephone number (ANI) and the physical address (ALI) of caller. An area must have a less than 10% error rate in their 9-1-1 database to implement Enhanced 9-1-1 with the ALI (Automatic Location Identification) feature.
- Those areas depicted on the map as pending include the Havasupai, Hopi and San Carlos Reservations. Additionally, Cameron, east of Flagstaff on the Navajo Reservation and the Morman Lake recreation area fall into that category. The City of Flagstaff Communications is working on Cameron and Mormon Lake to implement 9-1-1 services. A dialog has been opened with the Hopi and San Carlos Reservations. The Supai area of Coconino County is remote and there are logistical issues that may preclude that area from implementing 9-1-1 service.
- Based on the December 2000 Access Line Report, there are approximately 4,000 customers without 9-1-1 service. The total number of landline customers in Arizona with access to 9-1-1 services exceeds 3.2 million.

ARIZONA 9-1-1 STATUS



Map as of October 2001

ARIZONA 9-1-1 STATUS



Map as of October 2001

Emergency Telecommunication Services Excise Tax
Historical Data

- Enabling State Legislation -
  On June 22, 1983, the Arizona State Legislature adopted the Emergency Telecommunication Services Revolving Fund. The fund was established specifically to facilitate the on-going implementation of emergency 9-1-1 systems and services throughout Arizona. The Department of Administration was charged with oversight responsibilities for the fund and the development of guidelines for the distribution of those funds to the 9-1-1 community. Article 4, sections R2-1-401 through R2-1-409 governs the mechanics by which 9-1-1 service is established. The rules and regulations are used a checklist for the installation and funding of 9-1-1.

  The original tax was set at a cap of 1.50% of the access lines fees for local telecommunications services. Annually, the Director of the Department of Administration submitted a recommendation to the Joint Legislative Tax Committee on the tax levy for the next year.

- 9-1-1 Implementation -
  The first basic 9-1-1 system was installed in the City of Sierra Vista in 1975. The cities of Safford and Sedona followed shortly thereafter. Basic 9-1-1 provides only voice communication between the caller and the 9-1-1 center.

  The first enhanced 9-1-1 system was installed in Tucson on January 6, 1985. At the time Tucson served a population of approx. 650,000 including both city and county areas. Enhanced 9-1-1 provides both the name of the caller, the address and telephone number of the caller. The calls are routed based on the prefix or the specific address.

  Enhanced 9-1-1 was introduced in the Phoenix metropolitan area in the fall of 1985.

- Subsequent State Legislation -
  During the forty-third Legislature, first regular Session, 1997, changes to the legislation, implemented a tax of $.10/mo on a wireless provider for each activated wireless service. The session also repealed the Joint Legislative Tax Committee and therefore, the responsibility for tax adjustments for the Telecommunication Services Excise Tax reverted to the Legislature.

  The most recent legislative change occurred during the forty-fifth Legislature, first regular session of 2001. The major change provided parity between the wireless and wireline tax and established the rate at $.37. Documentation was provided to justify the need to increase the tax to effectively handle the issues that the wireless telephone service has created. Today, when calling 9-1-1 from a wireless telephone, the 9-1-1 operator does not have the tools to reconnect to the caller, nor locate the caller as with

Enhanced 9-1-1 service on wireline devices. It also allowed for the wireless carriers to recoup their costs of providing Enhanced 9-1-1 service.

- Federal Legislation -
  In June 1996, the Federal Communications Commission adopted Docket No. 94-102 which established the requirement that if the 9-1-1 Centers could receive the information that the wireless carriers had to provide Enhanced 9-1-1 service. Under Phase I or a two-phase approach, by April 1998, the carriers must be able transmit the calling party's telephone number and address information for the cell site to a predetermined 9-1-1 center if requested by the 9-1-1 Center. Under Phase II, the carriers by October 2001, must be able to provide addressing information within 120 meters of the call, to the 9-1-1 center. There was language in the document that a cost recovery mechanism must be in place prior to the carrier delivering that information.

  The Wireless Communications and Public Safety Act (S.800) was signed into law on October 26, 1999 officially making 9-1-1 the universal emergency number for America. It was also hoped that this legislation would spur the implementation of location technology for wireless 9-1-1 calls. This law provided wireless users, operators and telephone companies the same protection from liability that was afforded the wireline telephone companies.

  In November 1999, because movement toward implementation of Phase I was slow to non-existent, the FCC took steps to amend their initial docket. The changes amended its cost recovery rule to modify the requirement that a mechanism for cost recovery be in place before a carrier is obligated to provide service. It now emphasized that 9-1-1 Centers could request the service and work out an agreement for the associated costs. Therefore, carriers could approach the implementation as the cost of doing business or negotiate for only recurring charges.

  Between 1999 - May 2001, the FCC took several actions in an attempt to jumpstart the wireless implementation project.

  From 1996 to present, the major road blocks for implementation of Phase I and/or Phase II has been the cost and liability issue. The liability issues were resolved with the passage of the Wireless Communications and Public Safety Act of 1999. The remaining issue is still focused around the cost of providing the service.

  In May of this year, the FCC clarified the wireless carriers responsibility for Phase I wireless 9-1-1 implementation costs. In their response to a King County, Washington's request for clarification, the FCC ruled that the proper demarcation point for allocating costs between the wireless carriers and the 9-1-1 centers is at the 9-1-1 selective router maintained by the Incumbent Local Exchange Carrier. Therefore the carriers could no longer recoup their costs for the entire implementation

and recurring charges. The 9-1-1 center would be responsible for the costs associated with those components from the 9-1-1 switching center to the 9-1-1 center.

- Phase I Pilot Project -
  In April 1999, the Joint Legislative Budget Committee gave a favorable review of the plan to commit monies from the Emergency Telecommunication Services Revolving Fund to implement the Phase I wireless pilot project in Pima County. Due to delays by the wireless carriers, only three of the eight wireless carriers have implemented service. Verizon Wireless was the first carrier to comply with the FCC Docket 94-102, turning up service in January 2000.

- Current Status -
  All fifteen counties in the State have some form of 9-1-1 service. More than 99.9% of the telephone service within Arizona has access to 9-1-1. Those areas without 9-1-1 service includes the Hopi, San Carlos and Supai Tribal property and two small pockets in Coconino County. Although the majority of the Navajo Reservation does have 9-1-1 service, it is only basic 9-1-1 service.

  Of the 99.9%, approximately 95% have Enhanced 9-1-1 services. Areas around the state continue to make progress in implementation of Enhanced 9-1-1 service.

  As of December 2000, there is in excess of 3.2 million wireline telephone services statewide. Based on the wireless tax revenue, it is estimated that there are 1.8 million activated wireless/cellular services in Arizona.

  Most of the frustration by the 9-1-1 centers stems from the inability to determine pertinent information when receiving calls from wireless/cellular telephones

WTB/Policy
January 2001

FACT SHEET

FCC WIRELESS 911 REQUIREMENTS

In a series of orders since 1996, the Federal Communications Commission (FCC) has taken action to improve the quality and reliability of 911 emergency services for wireless phone users, by adopting rules to govern the availability of basic 911 services and the implementation of enhanced 911 (E911) for wireless services.

BACKGROUND ON WIRELESS 911

The FCC's wireless 911 rules seek to improve the reliability of wireless 911 services and to provide emergency services personnel with location information that will enable them to locate and provide assistance to wireless 911 callers much more quickly. To further these goals, the agency has required wireless carriers to implement E911 service, subject to certain conditions and schedules. The wireless 911 rules apply to all cellular licensees, broadband Personal Communications Service (PCS) licensees, and certain Specialized Mobile Radio (SMR) licensees.

BASIC WIRELESS 911 SERVICES

The basic 911 rules require wireless carriers to transmit all 911 calls to a Public Safety Answering Point (PSAP) without regard to validation procedures intended to identify and intercept calls from non-subscribers. Under the rules, therefore, both subscribers and non-subscribers can dial 911 and reach emergency assistance providers without having to prove their subscription status.

Many wireless 911 calls are made by "Good Samaritans" reporting traffic accidents, crimes, or other emergencies. Prompt delivery of these and other wireless 911 calls to public safety organizations benefits the public at large by promoting safety of life and property.

911 CALL PROCESSING PROCEDURES

In May 1999, the FCC adopted requirements to improve the ability of cellular phone users to complete wireless 911 calls. The 911 call completion rules are intended to improve the security and safety of analog cellular users, especially in rural and suburban areas.

Under the rules, all mobile phones manufactured for sale in the United States after February 13, 2000, that are capable of operating in an analog mode, including dual-mode and multi-mode handsets, must include a special method for processing 911 calls. When

a 911 call is made, the handset must override any programming that determines the handling of ordinary calls and must permit the call to be handled by any available carrier, regardless of whether the carrier is the customer's preferred service provider. Handsets capable of operating in analog mode must incorporate any one or more of the 911 call system selection processes endorsed or approved by the Commission.

PHASE I E911 REQUIREMENTS

As of April 1, 1998, or within six months of a request by the designated Public Safety Answering Point (PSAP), whichever is later, covered carriers are required to provide to the PSAP the telephone number of the originator of a 911 call and the location of the cell site or base station receiving a 911 call. This information assists in the provision of timely emergency responses both by providing some information about the general location from which the call is being received and by permitting emergency call-takers to re-establish a connection with the caller if the call is disconnected.

PHASE II E911 REQUIREMENTS

Wireless carriers are required to provide Automatic Location Identification (ALI) as part of Phase II E911 implementation beginning October 1, 2001, as detailed below. Originally, the FCC's rules envisioned that carriers would need to deploy network-based technologies to provide ALI. In the past several years, there have been significant advances in location technologies that employ new or upgraded handsets. In September 1999, the FCC revised its rules to better enable carriers to use handset-based location technologies to meet the Phase II requirements. In particular, the FCC established separate accuracy requirements and deployment schedules for network-based and handset-based technologies. In August 2000, the FCC made minor adjustments to the deployment schedule for handset-based technologies. The E911 Phase II requirements are as follows:

- Handset-Based ALI Technology: Wireless carriers who employ a Phase II location technology that requires new, modified or upgraded handsets (such as GPS-based technology) may phase-in deployment of Phase II subject to the following requirements:

    - Without respect to any PSAP request for Phase II deployment, the carrier shall:

        1. Begin selling and activating ALI-capable handsets no later than October 1, 2001;
        2. Ensure that at least 25 percent of all new handsets activated are ALI-capable no later than December 31, 2001;
        3. Ensure that at least 50 percent of all new handsets activated are ALI-capable no later than June 30, 2002; and
        4. Ensure that 100 percent of all new digital handset activated are ALI-capable no later than December 31, 2002 and thereafter.

5. By December 31, 2005, achieve 95 percent penetration of ALI-capable handsets among its subscribers.

- Once a PSAP request is received, the carrier shall, in the area served by the PSAP, within 6 months or by October 1, 2001, whichever is later:

  1. Install any hardware and/or software in the CMRS network and/or other fixed infrastructure, as needed, to enable the provision of Phase II E911 service; and
  2. Begin delivering Phase II E911 service to the PSAP.

- Network-Based ALI Technology: As of October 1, 2001, within 6 months of a PSAP request, carriers employing network-based location technologies must provide Phase II information for at least 50 percent of the PSAP's coverage area or population. Within 18 months of a PSAP request, carriers must provide Phase II information for 100 percent of the PSAP's coverage area or population.

- ALI Accuracy Standards: The FCC adopted the following revised standards for Phase II location accuracy and reliability:

  - For handset-based solutions: 50 meters for 67 percent of calls, 150 meters for 95 percent of calls;

  - For network-based solutions: 100 meters for 67 percent of calls, 300 meters for 95 percent of calls.

- ALI Implementation Plan Report: The FCC required wireless carriers to report their plans for implementing E911 Phase II, including the technology they plan to use to provide caller location, by November 9, 2000. This report was aimed at providing information to permit planning for Phase II implementation by public safety organizations, equipment manufacturers, local exchange carriers, and the FCC, in order to support Phase II deployment by October 1, 2001.

CONDITIONS FOR ENHANCED 911 SERVICES

The E911 Phase I requirements, as well as certain of the Phase II requirements, are applicable to wireless carriers only if the administrator of the designated PSAP has requested the service and is capable of receiving and utilizing information provided. In November 1999, the FCC revised its E911 rules to remove the prerequisite that a cost recovery mechanism for wireless carriers be in place before carriers are obligated to provide E911 service in response to a PSAP request. The PSAP must have the means of covering its costs of receiving and utilizing the E911 information, however, in order to make a valid request for E911 service. The FCC's rules do not mandate any specific state action nor specify any particular mechanism for funding the technology and service capabilities necessary to enable the PSAP to make a valid service request.

IMPLEMENTATION OF 911 ACT

In August 2000, the FCC adopted an Order to implement the Wireless Communications and Public Safety Act of 1999 (911 Act), enacted on October 26,1999. The purpose of the 911 Act is to enhance public safety by encouraging and facilitating the prompt deployment of a nationwide, seamless communications infrastructure for emergency services that includes wireless communications. The FCC initiated the implementation proceeding to address the provisions of the 911 Act and to fulfill the Congressional mandates set forth therein. Specifically, in the Order adopted in August 2000, the FCC took the following initiatives:

- designated 911 as the universal emergency telephone number within the United States for reporting an emergency to appropriate authorities and requesting assistance, effective upon August 29, 2000;
- sought comment on appropriate transition periods for areas in which 911 is not currently in use as an emergency number, as well as on service area-specific circumstances and capabilities that must be addressed before carriers can deploy 911 as the uniform emergency number; and
- sought comment on how the FCC should facilitate states' efforts to deploy comprehensive emergency communications systems – for example, through guidelines, meetings, or other information-sharing measures – in a manner that does not impose obligations or costs on any person.

The 911 Act also added provisions dealing specifically with wireless location information to 47 U.S.C. § 222, the section of the Communications Act that governs treatment of customer proprietary network information (CPNI) and subscriber list information (SLI). The Commission expects to initiate a proceeding to interpret and clarify these provisions in early 2001.

Arizona Department of Administration
Consultant Study Information

In November 1998, the Arizona Department of Administration issued an RFP for consulting services that would review the 9-1-1 Program. The scope of work included:

1. A review for compliance of the Arizona Revised Statutes (ARS 41-1471 and 41-1472 pertaining to the 9-1-1 Program.
2. A review of the Arizona Administrative Code Title 2, R2-1-401 - R2-1-411 with the intent of determining if the code meets the needs of the political subdivisions of the State who are eligible for funding.
3. An analysis of the existing excise tax structure to determine how to best meet the funding needs of the 9-1-1 program.
4. An assessment of what effect meeting the requirements of FCC docket 94-102 both Phase I and Phase II would have on the State of Arizona and the continued funding of 9-1-1 services.

RCC Consultants, Inc was awarded the contract and the report was completed by June 1999.

The results of the study were broken up into two separate deliverable products. Below is a summary of those reports.

The Compliance with Legislation Report addressed items 1 and 2 of the scope of work. The report included information obtained during site visits to the 9-1-1 Centers across the State and a review of both ARS 41-1471 and Title 2 of the Administrative Code. The recommendations were as follows:

- Among those 9-1-1 Centers surveyed, more than 90% were satisfied with the services provided by the State 9-1-1 Office. The remaining 10% were not wholly dissatisfied, but rather had issues with the existing process for approval of new equipment required at the 9-1-1 Centers.
- Written guidelines should be developed regarding equipment types, features and functionality that would be approved and funded by the State. Virtually all 9-1-1 equipment manufactured today is standardized on PC Workstation based systems. The cost of these new systems may, in fact, be double what the cost of providing 9-1-1 equipment was in the past. The concerns expressed by the 9-1-1 Center Managers strongly indicate a need for the development of new standards and specifications for the equipment required to both support today's 9-1-1 Center and to be capable in the future of supporting Phase I and Phase II of Wireless 9-1-1.
- That although there may be some reserve funds, with the growth and expansion of 9-1-1 centers in the State, this surplus is not the "comfortable cushion" it may appear to be. Like everything else, since originally

envisioned in 1985, the acquisition costs for new 9-1-1 equipment, as well as telephone company rates, have escalated.

- In their review of Title 2 rules and regulations, the consultants found several areas where they suggested changes to accommodate both meeting the existing regulations in today's world as well as providing necessary increased State support for equipment and services provided to the 9-1-1 Centers.
- Among their recommendations, was the need to provide the funding necessary to ensure that 9-1-1 Center Mangers maintained a P.01 (1 busy signal out of 100 calls) level of service. Through an annual call study, conducted by the telephone company, the Mangers could determine if the correct trunking is in place to handle the call load. Also, additional funding should be looked at for public education. This item was also addressed in the Tax Analysis Report.
- There was also concern that funds should be available to assist the 9-1-1 Centers with the development and management of their Master Street Address Guide used to ensure addressing standards are met.

The Tax Analysis and Wireless 9-1-1 Impact Report addressed items 3 and 4 of the scope of work. It brought to light those issues that most directly affected the ability for the State 9-1-1 program to meet the needs of the political subdivisions.

The findings of the study:

- On average, states comparable in population to Arizona collected funding on landline services (residential and business lines) in an amount four (4) times greater than that collected in Arizona.
- On average, states comparable in population to Arizona collected funding on wireless (Cellular & PCS) services in an amount six (6) times greater than that collected in Arizona.
- Other nearby states such as Utah, Colorado and New Mexico, on average, also collected 9-1-1 fees at a rate 4-6 times greater than Arizona.
- Based on RCC's review of the current inventory of all of the 9-1-1 systems installed throughout the State, fifty-six percent (56%) of existing 9-1-1 systems were obsolete and required replacement to support future growth and Phase II of the FCC's Wireless Docket.
- Based on budgetary costs, provided by Qwest, for new, FCC Phase II Wireless compliant equipment, RCC estimated that the State would be required to provide an estimated $37 million for acquisition of new equipment.
- An additional $78 million over the next five years for ongoing operational expenses, combined with new Wireless 9-1-1 network service from those providers.
- The vast majority of jurisdictions throughout the U.S. provide 9-1-1 funding for Public Education programs directed toward the speech and hearing-impaired community, school age children and senior citizens. There are no

provisions within current funding legislation to offer these much needed services to Arizona residents.

- A large number of 9-1-1 Center Managers need and have requested training from the State on both center management and the budgeting process. No funds are currently available to provide this needed support.
- In order for the State 9-1-1 Office to support the, over 100 9-1-1 Centers throughout the State, by providing services such as management of Public Education programs and training requested by 9-1-1 Center Mangers, additional staff must be in place.
- There are several areas of the State that do not yet have Enhanced 9-1-1 services available to their citizens because they can not afford the very expensive process of mapping and addressing structures required to develop the Enhanced 9-1-1 database. These necessary services are not currently funded within the existing legislation. Funding should be made available to provide equal public safety services to all citizens.

Included in this report was an assessment of the impact of Wireless 9-1-1 on the State 9-1-1 program. Under FCC Docket 94-102, the implementation of wireless 9-1-1 was divided into two phases.

Phase I Requirements

Phase I of the Docket requires the Wireless vendor to deliver to the PSAP data which represents the complete 10-digit telephone number of the Wireless handset, the street address of the Wireless tower, and the antenna face on that tower which is being utilized for the 9-1-1 call. Wireless towers have three sets of antennas, typically facing north, southeast and southwest. Therefore, the Phase I information would allow a call-taker at the 9-1-1 Center to reasonably define a geographic area from which the call has originated and have the telephone number for callback purposes in case of disconnect. This capability was mandated to be available to 9-1-1 centers by April of 1998.

Phase II Requirements

Phase II also requires the delivery of the 10-digit number of the Wireless handset, however, the cell tower address and antenna face are replaced with a requirement to provide the actual latitude and longitude coordinates of the Wireless device within 125 meters (400 ft.) with a minimum 67% accuracy. Included in this data stream to be sent to the 9-1-1 Center are a confidence level of the accuracy of the location data provided, the direction of travel, speed of travel, and height above sea level. The FCC Docket set a target date of June, 2000 for this information to be available to the PSAPs.

In the original Docket, there was a caveat, that in order for the 9-1-1 Center to request this information from a Wireless Provider, a funding mechanism must be

in place to reimburse the Wireless Provider for their costs of developing and sending the required information to the 9-1-1 Center.

As noted in the Historical Information paper, in November 1999, the FCC amended its cost recovery rule to modify the requirement that a mechanism for cost recovery be in place before a carrier is obligated to provide Enhanced 9-1-1 services. The FCC affirmed the requirement that a formal mechanism be in place for 9-1-1 Center cost recovery, but eliminated as a barrier to Enhanced 9-1-1 implementation any prerequisite that carrier Enhanced 9-1-1 costs be covered by a mechanism.

In a May 2001 ruling, the FCC clarified the wireless carrier responsibility for Phase I wireless 9-1-1 implementation costs. The Wireless Bureau identified that there is a proper demarcation point for allocating costs between the wireless carriers and the 9-1-1 Center. Through the Commission's regulations governing Enhanced 9-1-1 Service, wireless carriers are responsible for the costs of all hardware and software components and functionalities that precede the 9-1-1 Selective Router, including the trunks from the carrier's Mobile Switching Center to the 9-1-1 Selective Router, and the particular databases, interface devices, and trunk lines that may be needed to implement wireless Enhanced 9-1-1. The 9-1-1 Center must bear the costs of maintaining and/or upgrading the Enhanced 9-1-1 components and functionalities from the selective router to the 9-1-1 Center.

Based on the RCC findings, the recommendation included an increase funding for 9-1-1 services. It was identified that the tax should be increased to approximately $.35/mo. per access line for residential customers. The tax on wireless telephones should be increased to $.35/mo. so it would be the same as the wireline tax.

While less than what other comparable States collect in fees, these actions should be adequate to fund required 9-1-1 services for the citizens of the State of Arizona.

RCC further recommended that the 9-1-1 Program Office undertake the development of a long term Strategic Plan. This Plan should define path-forward initiatives and policies that will help insure optimum utilization of the anticipated budgetary resources.

Conclusion

With the conclusion of this study, the State 9-1-1 Office implemented many of the consultant's recommendations. The following is a list of those modifications that have changed the face of our program for the better.

- Of the more than 100 9-1-1 Centers statewide, 28 were upgraded with new equipment during FY00 and FY01. In FY02, an additional 37, 9-1-1 Centers are scheduled for equipment upgrade. The remainder of those sites will be upgraded during FY03.
- A more robust 9-1-1 network in the Qwest territory is scheduled for completion during FY02. This network will improve the delivery time for calls to 9-1-1 Centers, provide for 10-digit telephone number delivery to those centers and allow for inter-tandem transfer of calls and data between the three 9-1-1 switching centers in Arizona.
- In concert with the 9-1-1 Centers, a funding document was developed identifying those equipment peripherals that were eligible for funding.
- Title 2 of the Administrative Code was modified to address the issue of special projects that further statewide 9-1-1 availability, including addressing or data base projects, public education, and training programs on a case-by-case basis. Special project funding is based on community needs and the availability of funds. There are currently two counties who intend to submit a proposal to ADOA for funding assistance for their addressing programs.
- 9-1-1 Systems are now required to conduct an annual trunk study to ensure that they maintain a P.01 grade of service.
- During the last legislative session, the 9-1-1 Excise Tax was revamped to bring parity between the wireline and wireless services. The rate of $.37/mo. was established across the board.
- Additional changes identified that the Legislature shall review the recommendation of a tax levy every two years.
- Priority shall be given to establishing emergency telecommunications services in those areas of the state that are without 9-1-1 service. Of the more than 3.2 million telephones in service across the state, only 4,000 customers do not have access to 9-1-1. The majority of these are located on tribal land and we continue to work with the communities to establish 9-1-1 service.

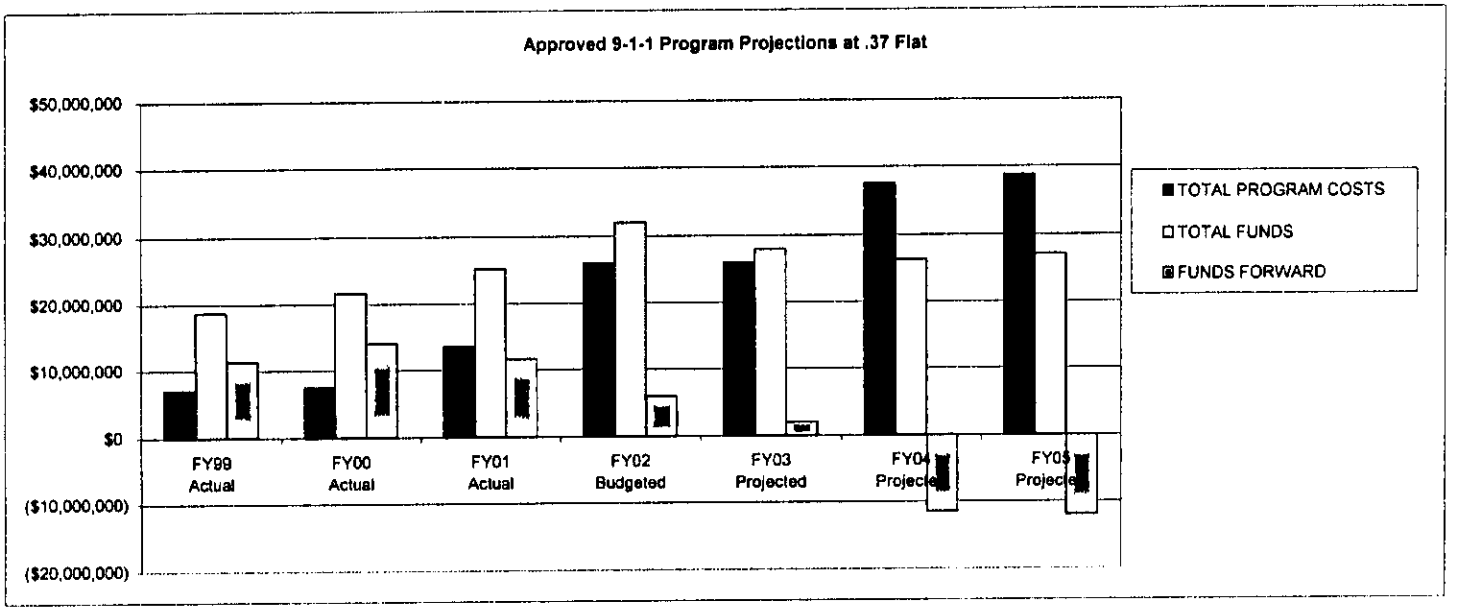
The State 9-1-1 Office will continue to support the needs of the 9-1-1 Centers within the rules established by the Legislature and the Department of Administration.

AS APPROVED W/FY01 ACTUAL EXPENDITURES & REVENUES and FY02 APPROVED BUDGET

9-1-1 Plan Projection

Includes Wireless & Excise Taxes at a Flat Rate of $.37

	ANNUAL INCREASE ASSUMPTIONS: *5% Operations Cost* *20% Wireless Tax* *5% Excise Tax*						
	Actual FY99	Actual FY00	Actual FY01	Budgeted FY02	Projected FY03	Projected FY04	Projected FY05
Administration	$235,508	$246,128	$227,009	$282,017	$440,381	$484,943	$540,409
PSAP Network Management				$182,400	$220,191	$242,472	$270,204
Operations	$5,397,435	$5,689,826	$6,058,715	$7,572,180	$7,950,789	$8,348,328	$8,765,745
Sub-Total	$5,632,943	$5,935,954	$6,285,724	$8,036,597	$8,611,361	$9,075,743	$9,576,358
Equipment & Installation	$1,441,806	$1,468,765	$6,912,775	$11,946,935	$13,141,629	$14,455,791	$15,178,581
Total Land Line System	$7,074,749	$7,404,719	$13,198,498	$19,983,532	$21,752,989	$23,531,535	$24,754,939
Phase I Wireless Network Element		$109,714	$343,930	$6,000,783	$4,191,047	$4,191,047	$4,191,047
Estimated Phase II Wireless Element			$0	$0	$0	$9,375,000	$9,375,000
Management Training			$0	$0	$0	$25,000	$25,000
Public Education			$0	$0	$0	$100,000	$100,000
Mapping & Address Support			$0	$0	$0	$250,000	$250,000
TOTAL PROGRAM COSTS	**$7,074,749**	**$7,514,433**	**$13,542,428**	**$25,984,315**	**$25,944,036**	**$37,472,582**	**$38,695,986**
FUNDS FROM PRIOR	**$9,385,516**	**$11,359,980**	**$12,906,500**	**$11,636,205**	**$5,913,680**	**$1,988,708**	**$0**
WIRELESS TAX @ 37 cents	$1,181,481	$1,507,573	$2,136,015	$7,903,256	$9,483,907	$11,380,688	$13,656,826
EXCISE TAX @ 37 cents per Land Line	$8,084,729	$7,846,057	$9,201,049	$11,544,000	$12,121,200	$12,727,260	$13,363,623
INTEREST INCOME		$829,591	$935,070	$814,534	$413,958	$139,210	$0
Total Collections	**$9,266,210**	**$10,183,221**	**$12,272,134**	**$20,261,790**	**$22,019,064**	**$24,247,157**	**$27,020,449**
TOTAL FUNDS	**$18,651,726**	**$21,543,201**	**$25,178,634**	**$31,897,995**	**$27,932,744**	**$26,235,865**	**$27,020,449**
PRIOR PERIOD ADJ	($216,997)	($6,803)	$0	$0	$0	($263,761)	($276,949)
EXPENDITURES	$7,074,749	$7,514,433	$13,542,428	$25,984,315	$25,944,036	$37,472,582	$38,695,986
FUNDS FORWARD	$11,359,980	$14,021,966	$11,636,205	$5,913,680	$1,988,708	($11,500,477)	($11,952,487)



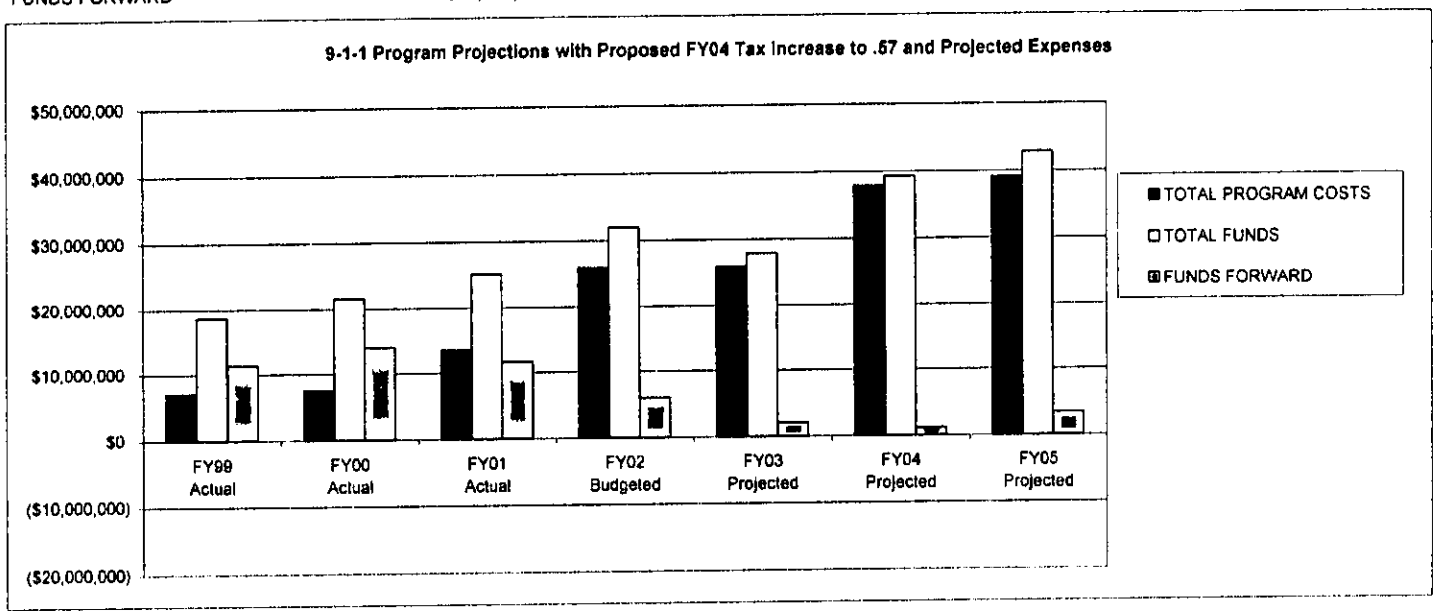
AS APPROVED W/FY01 ACTUAL EXPENDITURES & REVENUES and FY02 APPROVED BUDGET

Shows increase in FY04 from $.37 flat to $.57 flat

9-1-1 Plan Projection

Includes Wireless & Excise Taxes at a Flat Rate of $.37 increasing to $.57 in FY04

	ANNUAL INCREASE ASSUMPTIONS: 5% Operations Cost 20% Wireless Tax 5% Excise Tax					*Increase wireless and excise from $.37 flat to $.57 flat*	
	Actual FY99	**Actual FY00**	**Actual FY01**	**Budgeted FY02**	**Projected FY03**	**Projected FY04**	**Projected FY05**
Administration	$235,508	$246,128	$227,009	$282,017	$440,381	$745,570	$834,118
PSAP Network Management				$182,400	$220,191	$372,785	$417,059
Operations	$5,397,435	$5,689,826	$6,058,715	$7,572,180	$7,950,789	$8,348,328	$8,765,745
Sub-Total	$5,632,943	$5,935,954	$6,285,724	$8,036,597	$8,611,361	$9,466,683	$10,016,922
Equipment & Installation	$1,441,806	$1,468,765	$6,912,775	$11,946,935	$13,141,629	$14,455,791	$15,178,581
Total Land Line System	$7,074,749	$7,404,719	$13,198,498	$19,983,532	$21,752,989	$23,922,474	$25,195,502
Phase I Wireless Network Element		$109,714	$343,930	$6,000,783	$4,191,047	$4,191,047	$4,191,047
Estimated Phase II Wireless Element			$0	$0	$0	$9,375,000	$9,375,000
Management Training			$0	$0	$0	$25,000	$25,000
Public Education			$0	$0	$0	$100,000	$100,000
Mapping & Address Support			$0	$0	$0	$250,000	$250,000
TOTAL PROGRAM COSTS	**$7,074,749**	**$7,514,433**	**$13,542,428**	**$25,984,315**	**$25,944,036**	**$37,863,521**	**$39,136,549**
FUNDS FROM PRIOR	**$9,385,516**	**$11,359,980**	**$12,906,500**	**$11,636,205**	**$5,913,680**	**$1,988,708**	**$1,139,906**
WIRELESS TAX @ 37 cents	$1,181,481	$1,507,573	$2,136,015	$7,903,258	$9,483,907	$17,532,411	$21,038,893
EXCISE TAX @ 37 cents per Land Line	$8,084,729	$7,846,057	$9,201,049	$11,544,000	$12,121,200	$19,606,860	$20,587,203
INTEREST INCOME		$829,591	$935,070	$814,534	$413,958	$139,210	$79,793
Total Collections	**$9,266,210**	**$10,183,221**	**$12,272,134**	**$20,261,790**	**$22,019,064**	**$37,278,481**	**$41,705,890**
TOTAL FUNDS	**$18,651,726**	**$21,543,201**	**$25,178,634**	**$31,897,995**	**$27,932,744**	**$39,267,188**	**$42,845,796**
PRIOR PERIOD ADJ	($216,997)	($6,803)	$0	$0	$0	($263,761)	($276,949)
EXPENDITURES	$7,074,749	$7,514,433	$13,542,428	$25,984,315	$25,944,036	$37,863,521	$39,136,549
FUNDS FORWARD	$11,359,980	$14,021,966	$11,636,205	$5,913,680	$1,988,708	$1,139,906	$3,432,297



Q:\Pastpip\barbstuff\911

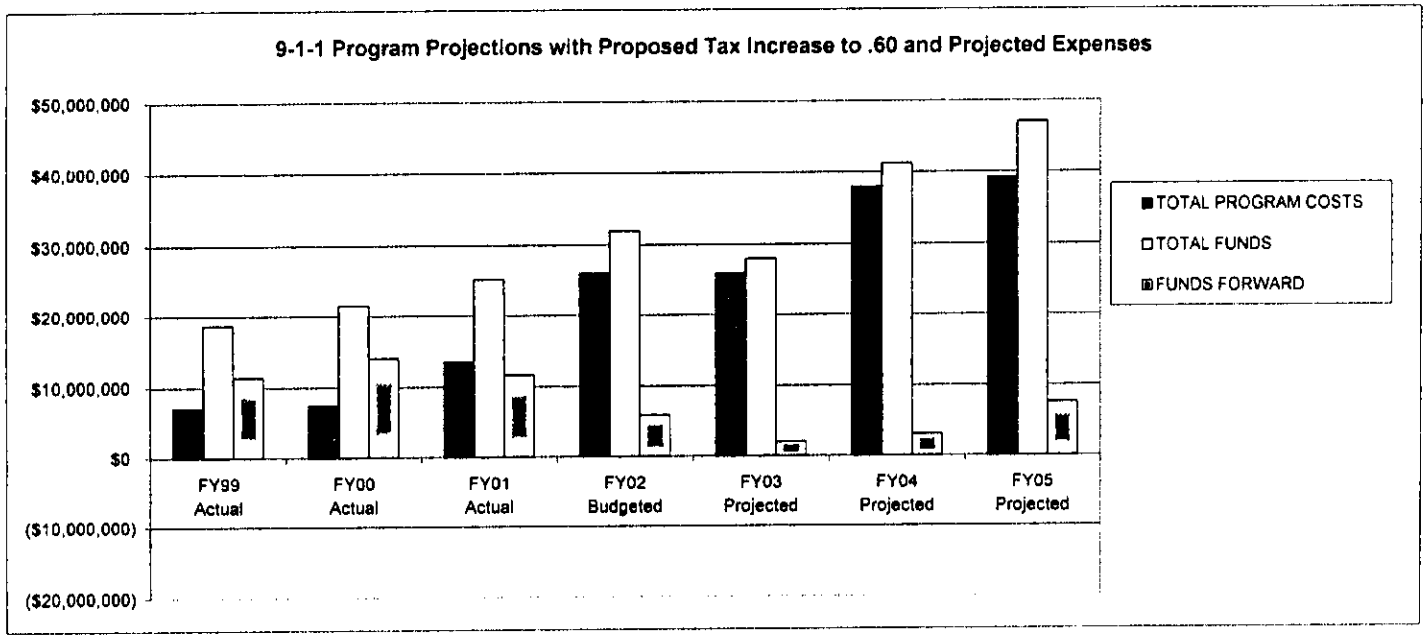
AS APPROVED W/FY01 ACTUAL EXPENDITURES & REVENUES and FY02 APPROVED BUDGET

Shows increase in FY04 from $.37 flat to $.60 flat

9-1-1 Plan Projection

Includes Wireless & Excise Taxes at a Flat Rate of $.37 increasing to $.60 in FY04

	ANNUAL INCREASE ASSUMPTIONS: *5% Operations Cost* *20% Wireless Tax* *5% Excise Tax*					*Increase wireless and excise from $.37 flat to $.60 flat*	
	Actual FY99	**Actual FY00**	**Actual FY01**	**Budgeted FY02**	**Projected FY03**	**Projected FY04**	**Projected FY05**
Administration	$235,508	$246,128	$227,009	$282,017	$440,381	$784,664	$880,589
PSAP Network Management				$182,400	$220,191	$392,332	$440,295
Operations	$5,397,435	$5,689,826	$6,058,715	$7,572,180	$7,950,789	$8,348,328	$8,765,745
Sub-Total	$5,632,943	$5,935,954	$6,285,724	$8,036,597	$8,611,361	$9,525,324	$10,086,629
Equipment & Installation	$1,441,806	$1,468,765	$6,912,775	$11,946,935	$13,141,629	$14,455,791	$15,178,581
Total Land Line System	$7,074,749	$7,404,719	$13,198,498	$19,983,532	$21,752,989	$23,981,115	$25,265,210
Phase I Wireless Network Element		$109,714	$343,930	$6,000,783	$4,191,047	$4,191,047	$4,191,047
Estimated Phase II Wireless Element			$0	$0	$0	$9,375,000	$9,375,000
Management Training			$0	$0	$0	$25,000	$25,000
Public Education			$0	$0	$0	$100,000	$100,000
Mapping & Address Support			$0	$0	$0	$250,000	$250,000
TOTAL PROGRAM COSTS	**$7,074,749**	**$7,514,433**	**$13,542,428**	**$25,984,315**	**$25,944,036**	**$37,922,162**	**$39,206,257**
FUNDS FROM PRIOR	**$9,385,516**	**$11,359,980**	**$12,906,500**	**$11,636,205**	**$5,913,680**	**$1,988,708**	**$3,035,964**
WIRELESS TAX @ 37 cents	$1,181,481	$1,507,573	$2,136,015	$7,903,256	$9,483,907	$18,455,170	$22,146,204
EXCISE TAX @ 37 cents per Land Line	$8,084,729	$7,846,057	$9,201,049	$11,544,000	$12,121,200	$20,838,800	$21,870,740
INTEREST INCOME		$829,591	$935,070	$814,534	$413,958	$139,210	$212,517
Total Collections	**$9,266,210**	**$10,183,221**	**$12,272,134**	**$20,261,790**	**$22,019,064**	**$39,233,179**	**$44,029,461**
TOTAL FUNDS	**$18,651,726**	**$21,543,201**	**$25,178,634**	**$31,897,995**	**$27,932,744**	**$41,221,887**	**$47,065,425**
PRIOR PERIOD ADJ	($216,997)	($6,803)	$0	$0	$0	($263,761)	($276,949)
EXPENDITURES	$7,074,749	$7,514,433	$13,542,428	$25,984,315	$25,944,036	$37,922,162	$39,206,257
FUNDS FORWARD	$11,359,980	$14,021,966	$11,636,205	$5,913,680	$1,988,708	$3,035,964	$7,582,219



FINDINGS:

As a result of Laws 2001, Chapter 373, the Legislature is required to review the funding for the telecommunications excise (911) tax every two years. The recommendation shall include documentation of the emergency telecommunication needs in this state and funding levels. In addition, the legislation required ADOA to separately account for wireless costs for 911 and report those costs by December 31, 2002.

The current tax structure will be sufficient until FY 2004. During the next legislative review, the tax structure will need to be examined due to the fact that the current 911 tax of 37 cents per month is scheduled to decline in FY 2006-2007 and again in FY 2007-2008. It is unlikely that these amounts will generate sufficient revenues to cover the required upgrades that are necessary for the Phase I and Phase II implementation.

Since the Legislature addressed the current funding needs of the state's 911 system in the 2001 legislative session, it is the recommendation of the committee to continue to monitor the 911 system without any further legislative changes at this time.

Additionally, the committee recommends a continuation of equal tax treatment between wire and wireless lines be maintained along with an equalization of reimbursement between wire and wireless providers.

In FY 2004, ADOA, 911 office, estimates that the system will be in deficit of $11.5 million. As such, the committee recommends that the legislature revisit the existing tax levies prior to FY 2004 to determine new tax rates necessary to sufficiently fund the 911 operating needs. In an effort to accurately assess the fiscal needs of the 911 system, the committee requests from the Joint Legislative Budget Committee an annual report of the fund's expenditures and revenues.

APPENDIX

LAWS 2001, CHAPTER 373
HB 2625 – EMERGENCY 911 SERVICES; REVENUE

Laws 2001, Chapter 373
HB 2625 – emergency 911 services; revenue

This bill provides an increase in the telecommunications service excise tax to fund equipment upgrades used for emergency telecommunication services (911).

Provisions:

- Removes the current tax rates of sixteen cents for landlines and ten cents for wireless service and sets new rates for both wire and wireless service to finance emergency telecommunication services as follows:
  - Beginning July 1, 2001, a tax levy of 37 1/2 cents per month
  - Beginning July 1, 2006, the tax levy at 28 cents per month
  - Beginning July 1, 2007 and thereafter, the tax levy at 20 cents per month
- Beginning in FY 2002, and every two years thereafter (currently every year), the Legislature must review the telecommunication services excise tax and make recommendations.
- Requires that priority for funding be given to areas of the state that are currently without 9-1-1 services.
- Currently, three percent of the fund is allocated to DOA for administrative costs. Beginning with FY 2002, DOA can use up to two-thirds of their administration costs and the remainder may be allocated to Public Safety Answering Point (PSAP) contracts.
- Expands the use of the Emergency Telecommunication Services Revolving Fund to allow a wireless carrier's one-time costs associated with the emergency 9-1-1 network to the extent that the wireless carrier has not recovered costs through the deduction mechanism specified in federal law.
- Requires telecommunication providers to provide a separate line item on each monthly bill for the tax on emergency 9-1-1 services and telecommunication services for the deaf.
- Establishes a 9-1-1 study committee consisting of twelve legislators, six from the State Senate and six from the House of Representatives. The study committee duties include an examination of the following:
  - The necessity of the requirements for maintaining and upgrading the current 911 system.
  - The funding mechanisms utilized by the state of Arizona to provide services and equipment required to handle 9-1-1 calls.
  - The cost estimates for maintaining and upgrading the current 911 system.
  - Recommendations for funding mechanisms to cover the maintenance and upgrades of the current 9-1-1 system, including determining the advisability of separating the monies in the revolving fund between wire and wireless providers.
- The study committee may utilize legislative staff. The committee is required to submit a report regarding the committee's recommendations for the Arizona 9-1-1 system by December 1, 2001 and the committee is repealed beginning in 2002.
- This bill contains a PROP 108 clause.

State of Arizona
House of Representatives
Forty-fifth Legislature
First Regular Session
2001

CHAPTER 373

HOUSE BILL 2625

AN ACT

AMENDING SECTIONS 41-704, 42-5252 AND 42-5253, ARIZONA REVISED STATUTES; RELATING TO EMERGENCY TELECOMMUNICATION SERVICES.

(TEXT OF BILL BEGINS ON NEXT PAGE)

Be it enacted by the Legislature of the State of Arizona:

Section 1. Section 41-704, Arizona Revised Statutes, is amended to read:

41-704. Emergency telecommunication services; administration; revolving fund

A. The director of the department of administration shall:

1. Adopt rules and procedures for administering and disbursing monies deposited in the emergency telecommunication services revolving fund, and at least quarterly review and approve requests by political subdivisions of this state for payment for operating emergency telecommunication service systems.

2. ~~Each~~ IN fiscal year 2001-2002 AND EVERY TWO YEARS THEREAFTER, recommend to the legislature the amount of the telecommunication services excise tax that will be required during the following TWO fiscal ~~year~~ YEARS for purposes of this section, with supporting documentation and information. THE LEGISLATURE SHALL REVIEW THE RECOMMENDATION AND TAKE LEGISLATIVE ACTION REGARDING THE RECOMMENDATION.

3. SEPARATELY ACCOUNT FOR COSTS ASSOCIATED WITH WIRELESS ACCESS SERVICE FOR EMERGENCY TELECOMMUNICATION SERVICE SYSTEMS AND REPORT THOSE COSTS TO THE PRESIDENT OF THE SENATE AND THE SPEAKER OF THE HOUSE OF REPRESENTATIVES BY DECEMBER 31, 2002.

B. An emergency telecommunication services revolving fund is established to be administered by the director. The fund shall be used for:

1. Necessary or appropriate equipment or service for implementing and operating emergency telecommunication services through political subdivisions of this state. PRIORITY SHALL BE GIVEN TO ESTABLISHING EMERGENCY TELECOMMUNICATION SERVICES IN THOSE AREAS OF THE STATE THAT ARE WITHOUT EMERGENCY TELECOMMUNICATION SERVICES.

2. Necessary or appropriate administrative costs or fees for consultants' services, not to exceed three per cent of the amounts deposited annually in the revolving fund. FOR FISCAL YEARS BEGINNING AFTER JUNE 30, 2001, THE DEPARTMENT MAY USE UP TO TWO-THIRDS OF THE THREE PER CENT OF THE AMOUNTS DEPOSITED ANNUALLY IN THE REVOLVING FUND FOR ADMINISTRATIVE COSTS. THE REMAINDER OF THE THREE PER CENT MAY BE ALLOCATED FOR LOCAL NETWORK MANAGEMENT OF CONTRACTS WITH PUBLIC SAFETY ANSWERING POINTS FOR EMERGENCY TELECOMMUNICATION SERVICES.

3. Monthly recurring costs of emergency telecommunication services, including expenditures for capital, maintenance and operation purposes.

4. A WIRELESS CARRIER'S COSTS ASSOCIATED WITH THE PROVISION, DEVELOPMENT, DESIGN, CONSTRUCTION AND MAINTENANCE OF THE WIRELESS EMERGENCY TELECOMMUNICATION SERVICES IN AN AMOUNT THAT THE WIRELESS CARRIER HAS NOT RECOVERED THROUGH THE DEDUCTION MECHANISM SPECIFIED IN FEDERAL LAW.

C. At the end of each fiscal year, any unexpended monies in the fund, including interest, shall be carried over and do not revert to the general fund but shall be applied to the extent possible to reduce the levy under

section 42-5252, subsection A, paragraphs 1, ~~and~~ 2 AND 3 for the following fiscal year.

Sec. 2. Section 42-5252, Arizona Revised Statutes, is amended to read:

42-5252. Levy of tax

A. A tax is levied ON EVERY PROVIDER in an amount:

~~1. Of one and one-fourth per cent of the provider's gross proceeds of sales or gross income derived from the business of providing exchange access services for the purpose of financing emergency telecommunication services.~~

~~2. Of ten cents a month on a wireless provider for each activated wireless service for the purpose of financing emergency telecommunication services.~~

1. FOR THE FISCAL YEARS BEGINNING FROM AND AFTER JUNE 30, 2001 AND ENDING BEFORE JULY 1, 2006, THIRTY-SEVEN CENTS PER MONTH FOR EACH ACTIVATED WIRE AND WIRELESS SERVICE ACCOUNT FOR THE PURPOSE OF FINANCING EMERGENCY TELECOMMUNICATION SERVICES.

2. FOR THE FISCAL YEARS BEGINNING FROM AND AFTER JUNE 30, 2006 AND ENDING BEFORE JULY 1, 2007, TWENTY-EIGHT CENTS PER MONTH FOR EACH ACTIVATED WIRE AND WIRELESS SERVICE ACCOUNT FOR THE PURPOSE OF FINANCING EMERGENCY TELECOMMUNICATION SERVICES.

3. FOR THE FISCAL YEARS BEGINNING FROM AND AFTER JUNE 30, 2007, TWENTY CENTS PER MONTH FOR EACH ACTIVATED WIRE AND WIRELESS SERVICE ACCOUNT FOR THE PURPOSE OF FINANCING EMERGENCY TELECOMMUNICATION SERVICES.

~~3.~~ 4. ~~Of~~ One and one-tenth per cent of the provider's gross proceeds of sales or gross income derived from the business of providing exchange access services for the purpose of financing telecommunication devices for the deaf and the severely hearing and speech impaired under the program established pursuant to section 36-1947.

B. EACH PROVIDER SHALL STATE ON THE INVOICE TO CUSTOMERS A SEPARATE LINE ITEM STATING THE AMOUNT OF TAX LEVIED PURSUANT TO SUBSECTION A OF THIS SECTION.

~~B.~~ C. Unless the context otherwise requires, article 1 of this chapter governs the administration of the tax imposed under this section.

Sec. 3. Section 42-5253, Arizona Revised Statutes, is amended to read:

42-5253. Remission and distribution of revenues

A. Each provider shall remit monthly to the department the amount of tax due pursuant to section 42-5252, accompanied by an information return as prescribed by the department.

B. The department shall deposit, pursuant to sections 35-146 and 35-147, all monies remitted pursuant to this article as follows:

1. Section 42-5252, subsection A, paragraphs 1, ~~and~~ 2 AND 3 in the emergency telecommunication services revolving fund.

2. Section 42-5252, subsection A, paragraph ~~3~~ 4 in the telecommunication fund for the deaf.

Sec. 4. Study committee on Arizona's 911 system; report

A. A study committee on Arizona's 911 system is established consisting of:

1. Six members of the senate who are appointed by the president of the senate, not more than three of whom are members of the same political party. The president of the senate shall select one of these members to serve as cochairperson of the study committee.

2. Six members of the house of representatives who are appointed by the speaker of the house, not more than four of whom are members of the same political party. The speaker of the house of representatives shall select one of these members to serve as cochairperson of the study committee.

B. The study committee shall examine and hold hearings regarding:

1. The necessity of and requirements for maintaining and upgrading the current 911 system.

2. The funding mechanisms utilized by the state of Arizona to provide services and equipment required to handle 911 calls.

3. The cost estimates for maintaining and upgrading the current 911 system.

4. Recommendations for funding mechanisms to cover the maintenance and upgrades of the current 911 system, including reviewing the advisability of segregating the emergency telecommunications services revolving fund established by section 41-704, Arizona Revised Statutes, between wire and wireless providers.

C. On or before December 1, 2001, the committee shall submit a report to the governor, the president of the senate and the speaker of the house of representatives that includes the study committee's recommendations for statutory changes, if any, regarding Arizona's 911 system. The study committee shall provide a copy of the report to the secretary of state and the director of the Arizona state library, archives and public records.

D. Legislative staff shall provide services to the study committee as the study committee deems necessary.

Sec. 5. Delayed repeal

Section 4 of this act, relating to the study committee on Arizona's 911 system, is repealed from and after December 31, 2001.

Sec. 6. Requirements for enactment; two-thirds vote

Pursuant to article IX, section 22, Constitution of Arizona, this act is effective only on the affirmative vote of at least two-thirds of the members of each house of the legislature and is effective immediately on the signature of the governor or, if the governor vetoes this act, on the subsequent affirmative vote of at least three-fourths of the members of each house of the legislature.

APPROVED BY THE GOVERNOR MAY 7, 2001.
FILED IN THE OFFICE OF THE SECRETARY OF STATE MAY 8, 2001.